

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable: WDFW Wooten Wildlife Area Tucannon River and Floodplain Restoration Projects.
2. Name of applicant: Dave Karl
3. Address and phone number of applicant and contact person: 1340 N. 13th Ave Walla Walla, WA 99362 (509) 527-4138
4. Date checklist prepared: January 10, 2013
5. Agency requesting checklist: WDFW
6. Proposed timing or schedule (including phasing, if applicable):

The proposal is for all Large Wood (LW replenishment) and Floodplain Restoration Projects identified for the Washington State Wooten Wildlife Area under the BPA contract #2010-077 Tucannon Habitat Programmatic. The Tucannon Habitat Programmatic is administered by the Snake Region Salmon Recovery Office. There are ~~two~~ four LW projects scheduled for 2014 Project Area 14 (PA14) RM 39.2 to 37.15 ~~and~~, Project Area 3 (PA3) RM 48.65 to 46.8, Project Area 1 RM 49.3 to 50.0, and PA 15 RM 36.4 to 37.0. The timing for all restoration projects will follow the in-water work window guidelines for the Upper Tucannon River July 15th to August 30th. Work that occurs above the ordinary high water mark and does not impact aquatic life can occur outside of the in-water work window. Future LW restoration phases will occur according to the same schedule unless official changes to the in-water work window are made.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. Yes. The Bonneville Power Administration (BPA), as part of their mitigation requirements under the current Biological Opinion, has established programmatic funding (BPA contract #2010-077 Tucannon Habitat Programmatic) through the Snake Region Salmon Recovery Board. The programmatic contract includes 1.3 million dollars per year through 2018 to improve stream habitat conditions for ESA Threatened Snake River Spring Chinook Salmon. The Spring Chinook population in the Tucannon River Basin is the only Spring Chinook population in the Lower Snake River. The W.T. Wooten Wildlife Area encompasses 17 miles of critical Tucannon River spawning and rearing habitat for Spring Chinook. This proposal is planned to cover projects that primarily focus on Large Wood Restoration Projects and Floodplain Restoration Projects on the W.T. Wooten Wildlife Area through 2018. Large wood replenishment and floodplain reconnection/restoration projects have been identified through local Salmon Recovery efforts and the 2011 Tucannon Geomorphic Assessment as the top priority for Chinook salmon habitat restoration in the Tucannon River. (Attachments) Snake Region Salmon Recovery Board (SRSRB) 3- Year Work Plan – full list of projects for the Snake Region including the Tucannon River, Tucannon Restoration Geomorphic Assessment and Conceptual Restoration Projects (Anchor QEA,2011), Snake River Salmon Recovery Plan.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. Snake River Salmon Recovery Plan, 2006; Tucannon River Habitat Assessment and Conceptual Restoration Plan, Anchor QEA, 2011; WT Wooten Wildlife Area Geomorphic Assessment, NRCS, 2004; Snake Region Salmon Recovery Board Long-range Work Plan for Tucannon River [TetraTech Assessment and Design for PA 1 & 3.](#)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. No, there are not pending approvals for activities affecting the property.

10. List any government approvals or permits that will be needed for your proposal, if known. The list of permits for each project may be different, but generally permits required to implement stream restoration projects in the Tucannon River (3 listed salmonid species) requires ESA consultation, generally utilizing programmatic that have been developed, i.e. The BPA HIP Programmatic or the WA. State Programmatic (SPIF) administered by the Army Corps of Engineers, USACE., Shorelines Permit Columbia and/or Garfield County(depending on project location), Washington State Hydraulic Project Approval Permit (HPA), WDOE Water Quality Certification, USACE 404 permit, Dept. of Natural Resources approval, and a cultural survey, report, and approval through WA SHPO and local Native American Tribes. This set of approvals and permits will be done for each project completed under this SEPA.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

This proposal is for river and floodplain restoration projects done from 2013-2018 on the W.T. Wooten W.A., using funding from the BPA contract (2010-077) Tucannon Habitat Programmatic administered through the Snake Region Salmon Recovery Board. The Wooten Wildlife Area encompasses 17 miles of Tucannon River headwaters that are considered critical spawning and rearing habitat for Lower Snake River Spring Chinook. The projects have been developed using a 2011

geomorphic assessment done by Anchor, QEA (attached). The restoration actions in the Tucannon Basin are based on a framework proposed by Roni, et al (2002). 1. Protect and maintain natural processes – Promote natural hydrologic and sediment routing throughout the system, allow natural channel migration and wood recruitment, 2. Connect disconnected habitats- Reconnect oxbows, wetlands, and former main stem and side channels (floodplain), 3. Address roads, levees, and other human infrastructure impairing processes – Remove or modify culverts, levees, dredge spoils, diversion dams, and grade control structures, 4. Restore riparian processes – Isolate and protect healthy riparian areas, eradicate invasive species, and plant native communities, 5. Improve instream habitat conditions – Install large individual trees and LWD structures in the main channel. This proposal is intended to cover LW and Floodplain restoration projects identified using this framework. Anchor developed a set of conceptual (10%) designs for the Tucannon River, Reaches 8-10 and Project Areas 1-15 and 18 are located on the Wooten W.A. These conceptual designs were prioritized by Anchor and approved by the Tucannon Conservation Committee and SRSRB Regional Technical Team, into (3) tiered levels (attached). The geomorphic assessment results identified LW replenishment and restoring floodplain connection as two of the main objectives for Spring Chinook Habitat restoration. Restoring floodplain includes restoring large wood to the stream channel, to aggrade the channel and reconnects the river and its floodplain, removing dredge spoils and dikes to increase the floodplain area available to the river, and in some cases moving dikes back that provide protection for existing infrastructure. LW replenishment/restoration includes using helicopters to place trees into the river, building constructed log jams, dropping dead trees into the river when opportunity presents itself, and using chainsaw winches or other devices to pull LW from the floodplain into the channel. The Tucannon River is disconnected from the floodplain and has very little habitat complexity. The short term goals for LW restoration is to restore habitat complexity in the form of more frequent pools, reconnect secondary channels, and provide more cover for salmonids and other native fish. The general project objectives are to increase in-stream habitat complexity, maximize linkages between the river and the floodplain, increase the number and length of ephemeral and perennial channels, and improve riparian health and function.

In 2014⁴³, there are ~~two~~four projects scheduled for implementation Project Area 14 (PA14), PA 15, PA 1 and ~~Project Area PA 3 (PA3)~~. PA 14 is sponsored by WDFW WST Biologist, Dave Karl, and it is a LW replenishment project from river mile (RM) 39.2 (downstream from the hatchery bridge) to RM 37.5 (Spring Lake). The project was designed by Tracy Drury, P.E. Anchor QEA and involves construction of 8 basic types of Engineered Log Jams (ELJ's) through the roughly 1.5 mile reach (design drawing/report attached). PA 15 is sponsored by Columbia County Conservation District, Terry Bruegman, and it is a Large Wood replenishment project from RM 37.0 (downstream from Headquarters boundary) to RM 36.3. The project was designed by Tracy Drury, P.E. Anchor QEA and involves construction of 7 basic types of Engineered Log Jams (ELJ's) through the roughly 0.7 mile reach. PA 15 also reconnects a significant historic channel to improve floodplain connectivity. PA 3 & 1 ~~are~~is sponsored by Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Tucannon Habitat Biologist, Eric Hoverson, and the project involves helicopter placement of full trees with root-balls from RM 48.6 (Little Tucannon confluence) to RM46.8 (Donnie Lake). The project was conceptually designed by Eric Hoverson ~~and~~-Gerald Middel (CTUIR), with final design and engineering done by Tetra Tech. ~~and The 60 % design was~~ reviewed by Bruce Heiner, WDFW Engineer ~~(design attached)~~. Helicopter placement is a low impact method for LW replenishment; however, some reaches require engineering to manage impacts to infrastructure and/or private property.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The William T. Wooten Wildlife Area is approximately 16,000 acres and is managed as one unit. It is located in Columbia and Garfield counties, 25 miles east of Dayton and 14 miles south of Pomeroy. About 17 miles of the Tucannon River are located within the boundaries. Elevations range from 4,100 feet on Hopkins Ridge, down to 1,800 feet on the lowest section of the Tucannon River.

Legal Description: PA 14 Large Wood Restoration, T10, R 41, Sections 21, 22, 27.

Legal Description: PA 3 River Miles 48.6 to 46.8, T9, R41, Sections 29, 30.

Legal Description: PA 1 River Miles 49.3 to 50, T9, R41, Sect 32 and T8, R41E, Sect 5.

Legal Description: PA 15 River Miles 36.3 to 37, T10, R41, Sect 16

Project locations maps attached

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, ~~steep slopes, mountainous,~~ other
- b. What is the steepest slope on the site (approximate percent slope)? The steepest slope that will be involved in the proposal is 2-3%.
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. River cobble, gravel, soil and sediment, there is no prime farmland on the project sites.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. There are some areas that have unstable soils, they are localized, and generally considered for stabilization as part of the project proposals. The main cause of unstable soils is loss of riparian, diking, and historic loss of channel length/sinuosity. This proposal and the projects developed for implementation will improve conditions for all of the above by re-establishing anastomosing channel form and a function floodplain and riparian zone throughout the Wildlife Area.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. PA 14 includes areas of cobble augmentation. To summarize, the hatchery intake dam has altered bedload movement through the reach downstream of the intake dam. This is mostly pronounced for the first few miles below the dam. PA14 includes cobble augmentation to help the process of channel aggradation and improve channel conditions at two headcuts identified in the project reach, the major headcut identified below the hatchery bridge. The proposed method is simply to use dredge spoils, which currently constrict the floodplain, and place the material on existing cobble bars to be mobilized during high flows. The quantities designed are approximately 750 cubic yards of cobble located at the upstream end of the project (below the hatchery bridge and integrated into the construction of Bab-1 for access and bar development). The design calls for annual cobble augmentation, but augmentation will occur using an adaptive approach based on when suitable flows mobilize the augmented cobble material. Additionally, some of the LW ELJ's include backfilling of cobble material to counter the large wood buoyancy and provide stable ELJ's during flood events. The material used will be the same dredge spoils located on the floodplain. The dredge spoils will be utilized to help improve future floodplain connection as the river channel becomes restored and reconnected to the floodplain; currently they block existing historic channels on the floodplain. For future projects historic dredge spoils will be removed from the floodplain or potentially used for fill in ELJ's that require native material backfill. The area below the intake dam has an altered bedload budget; however there is an emphasis on improving intake dam maintenance, by allowing the bedload removed from the fore bay to be placed into the channel downstream to be naturally mobilized by the river. In the past, permit requirements have required hatchery staff to remove dredge spoils and dispose of it in an approved location outside of the floodplain.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Yes, erosion can occur as a result of construction of some of the proposed projects, but we do not anticipate erosion beyond what occurs in a naturally functioning river system. Large Wood debris Jams are critical for sediment management in a natural stream system, rivers with natural LWD loading manage 50-80% of the natural erosion in a river system. LWD

does this by creating hydraulic breaks in the stream flow that deposit and hold sediments upstream and downstream from the wood structures. Floodplain Restoration develops conditions for the river to deposit sediments onto the floodplain during high flow events. Both 2013 projects are designed to promote natural function for the river and floodplain, and minimize excessive or unnatural erosion problems

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Most of the projects are designed to remove buildings and other impervious surfaces from the floodplain; therefore there will be a reduction in the percent of impervious surface area. In some cases impervious surfaces may be moved from the floodplain to a different location. For example, if a campground is removed from the floodplain to an area outside the floodplain, the amount of impervious surface would be relocated resulting in a net decrease in impervious surface within the floodplain. The projects constructed under this SEPA will not result in increased impervious surface, but will reduce the amount of impervious surface located in the natural floodplain.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: The Tucannon River is moderately to highly confined and incised within the Wooten W.A. boundaries, due to impacts from straightening the stream channel, logging, building and fortifying roads and bridges, and stream "cleanup" after flood events. Many of those activities have been restricted and the restoration efforts are designed to improve or reverse some of the impacts caused by past land use activities, therefore restoration of stream function and connection with the floodplain will be an improvement resulting in a reduction in erosion caused by human activities. Restoration of these key functions will improve riparian habitat, increase linkages with river and floodplain habitat, and add complexity to stream and floodplain interactions, all of which reduce harmful erosion within the river basin.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known. Most emissions would be from equipment utilized for construction of the restoration projects. Equipment will include Helicopters, excavators, dump trucks, front end loaders, dozers, etc. Approximate quantities of equipment emissions unknown.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. NO

c. Proposed measures to reduce or control emissions or other impacts to air, if any: NONE

3. Water

a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. Yes, The Main stem River is the Tucannon River; the major tributaries located in the Wooten W.A.

are Cummings Creek, Waterman Canyon Creek, Russell Spring Creek, Hartsock Spring Creek, Little Tucannon River, and () that feed back into the Tucannon R. Additionally, there are 8 manmade lakes (impoundments) found on the Wooten Wildlife Area, those lakes located in the floodplain include Beaver Lake, Watson Lake, Deer Lake, Curl Lake, and Big Four Lake. There is also a small abandoned farm pond; the pond is now part of the spring creek, on the Northern edge of the Hartsock Unit.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. Yes, the projects identified will require instream work in the described waters. The projects are generally designed to restore complex stream habitat and floodplain connection to improve natural river function. PA 14 LWD is a series of ELJ's constructed in and along the existing channel. Many of the ELJ's require dewatering to construct. (Plans attached) PA 3 is entirely a helicopter placement of trees with rootballs into the stream channel and in the adjacent floodplain. Most projects done under this SEPA require work in the stream, but all stream work will ~~consist of~~include Large Wood restoration. PA 15 and PA 1 are also a series of ELJ's constructed in and along the Tucannon River.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. None identified for this application.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. NO
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. Yes, as previously stated, the projects will be done to improve floodplain function; therefore the projects will involve working in the 100 year floodplain. Projects will include removing artificial structures (buildings, parking lots, etc.) from the 100 year floodplain and adding large wood structure to the river to encourage better floodplain function.
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. NO

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known. The project is not designed to impact groundwater in an artificial way, however, improved floodplain function and river habitat complexity will result in improved groundwater interchange. Stream channel complexity increases hyporheic exchange and increased surface water elevations caused by aggraded channel plan form and reconnecting secondary channels will improve local aquifer recharge.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the

system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. **NONE**

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. **NONE**

2) Could waste materials enter ground or surface waters? If so, generally describe. **NO**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: Projects will improve existing conditions for surface, ground, and runoff water interactions by increasing roughness on the floodplain and in the stream, improving habitat complexity and diversity, and reconnecting floodplain, riparian and wetland function outside of the channel.

4. **Plants**

a. Check or circle types of vegetation found on the site:

_____ deciduous tree: alder, maple, aspen, other

_____ evergreen tree: fir, cedar, pine, other

X _____ shrubs

X _____ grass

X _____ pasture

_____ crop or grain

X _____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

_____ water plants: water lily, eelgrass, milfoil, other

X _____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered? There may be some removal of vegetation caused by construction of the proposed projects, mainly for staging materials and site access. All impacted areas have vegetation restored with native grass, shrubs, and trees. One of the goals of the proposal is to improve and increase riparian habitat within the Wooten W.A. Disturbed areas will be actively restored for riparian and floodplain vegetation. The net result of the proposal will be an increase in riparian vegetation and function.

c. List threatened or endangered species known to be on or near the site. **NONE**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: Proposed projects will include reclamation (restore lost vegetation) of impacted areas such as staging areas and access areas. Some projects include active restoration of riparian habitat, but most of the projects anticipate more passive restoration of riparian areas as a result of improving river and floodplain function.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:

- b. List any threatened or endangered species known to be on or near the site. Snake River Steelhead, Snake River Spring Chinook, Bull Trout.
- c. Is the site part of a migration route? If so, explain. The river is a migration route for Salmon, Steelhead, Bull Trout, Whitefish, and Bridge Lip Suckers, historically Pacific Lamprey were abundant in the Tucannon River.
- d. Proposed measures to preserve or enhance wildlife, if any: The proposal is designed to improve river and floodplain function. This restoration will improve aquatic and terrestrial habitats for fish and wildlife within the Tucannon River Floodplain by increasing habitat complexity and edge habitat and improving riparian conditions along the river. The proposal is completely directed at improving, preserving, and enhancing habitat for fish and wildlife in the Tucannon River Basin.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. NONE
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. NO
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: NONE

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. NO

1) Describe special emergency services that might be required. NONE

2) Proposed measures to reduce or control environmental health hazards, if any: NONE

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
NONE

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. We anticipate short-term noise from equipment used for construction (Helicopter, excavator, dozer). Noise would be, most often, work days and hours Monday – Friday 8:00AM to 7:00PM and occasionally on weekends during the same times.

3) Proposed measures to reduce or control noise impacts, if any: NONE

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Recreation; camping, fishing, hunting.

b. Has the site been used for agriculture? If so, describe. Yes, some of the area within the proposed sites was historically used for agriculture.

c. Describe any structures on the site. In PA 14 there is a hatchery and intake adjacent to the proposed project reach. At the bottom end of the project reach there is an old concrete bridge that is proposed for removal. The bridge is approximately 150 feet downstream from the Tucannon Road Bridge at Cummings Creek. For future proposed projects there are no structures identified to be impacted by implementation.

d. Will any structures be demolished? If so, what? There are no plans to demolish any structures such as buildings, however, some dikes and dredge spoils that reduce floodplain and river connectivity may be removed under the current proposal.

e. What is the current zoning classification of the site? Recreational

f. What is the current comprehensive plan designation of the site? The Blue Mountain Wildlife Area Plan, Wooten Wildlife Area Floodplain Management Plan is currently in draft, Snake Region Salmon Recovery Plan, Tucannon R. Subbasin Plan, Anchor 2011 Geomorphic Assessment and Conceptual Design Report.

g. If applicable, what is the current shoreline master program designation of the site? N/A

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. Not to my knowledge, the project sites are located on a State Wildlife Area and the purposes of the proposals are to improve environmental conditions within the Wildlife Area.

i. Approximately how many people would reside or work in the completed project? Each project will employ as many as 5-15 people during the implementation window.

j. Approximately how many people would the completed project displace? None

k. Proposed measures to avoid or reduce displacement impacts, if any: None, the project will not displace anyone.

Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: The proposed projects are and will be coordinated with existing partners and local government agencies. All projects are approved for funding by the Snake River Salmon Recovery Board, which includes County Commissioners (Garfield and Columbia), local landowners, and technical members.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. NONE

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. NONE

c. Proposed measures to reduce or control housing impacts, if any: NONE

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? N/A

b. What views in the immediate vicinity would be altered or obstructed? NONE

c. Proposed measures to reduce or control aesthetic impacts, if any: NONE

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? N/A projects would be constructed only during daylight hours.

b. Could light or glare from the finished project be a safety hazard or interfere with views? NO

c. What existing off-site sources of light or glare may affect your proposal? NONE

d. Proposed measures to reduce or control light and glare impacts, if any: NONE

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity? The proposed project location is a Washington State Wildlife Area, and therefore has many recreational opportunities including hiking, camping, fishing, horseback riding, hunting, wildlife viewing, and other related outdoor activities.

b. Would the proposed project displace any existing recreational uses? If so, describe. No, the proposed projects will increase recreational opportunities by improving habitat conditions for native fish and restoring riparian habitat for fish and wildlife.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: Work with the Citizens Advisory Group for the Wooten W.A. and local Sports Clubs, like Richland Rod and Gun Club, Tri-State Steelheaders, and Salmon Recovery Board.

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe. NO

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. The Wildlife Area is located on the Tucannon River that was used by the Native American Tribes prior to European settlers. The Wildlife Area also had historic homesteads, saw mills, farms, and ranches located within its boundaries. All projects proposed for implementation on a State Wildlife Area requires cultural resource compliance prior to construction of any project.

c. Proposed measures to reduce or control impacts, if any: For each project a proper cultural and historic review will be completed and approved by local government and citizens, WA SHPO and CTUIR and Nez Perce Tribes.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. The main road serving the site is the Tucannon River Rd. It is a U.S. Forest Service road through the Wooten Wildlife Area. USFS is a partner in the Tucannon Restoration efforts on the Wooten W.A. and the National Forest Lands.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? No, 50-60 miles.
- c. How many parking spaces would the completed project have? How many would the project eliminate? NONE, NONE
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). No
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. No
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

A typical project using helicopters for LWD Restoration would generate between 50-70 trips per day for up to 1.5 weeks. The projects will be done during the work window and therefore between July 15 and Sept 30. Holidays and weekends would be avoided because that is when the most recreational activity occurs on the Wildlife Area. The ELJ construction will require multiple trips to mobilize equipment and materials, but during construction on a few trips per day.

- g. Proposed measures to reduce or control transportation impacts, if any:

Implement the project during low recreational use times when possible, provide road flaggers to manage traffic, choose areas with minimal impacts to transportation, for example, fly trees from mountains to stream that do not cross roads or cross the fewest roads as possible. Post project timing ahead of time, so the public is aware of potential delays.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. NO
- b. Proposed measures to reduce or control direct impacts on public services, if any. NONE

16. Utilities

- a. Circle utilities currently available at the site: (electricity), natural gas, water, refuse service, (telephone), sanitary sewer, septic system, other.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. None of the projects in the proposal require an increase in utilities, projects under the proposal are all LW and Floodplain Restoration Projects.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: *David Karl*

Date Submitted: February 24, 2012

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise? N/A

Proposed measures to avoid or reduce such increases are:

N/A

2. How would the proposal be likely to affect plants, animals, fish, or marine life? The projects will likely improve habitat quality and restore natural processes to the Wooten W.A., net benefit for fish and wildlife.

Proposed measures to protect or conserve plants, animals, fish, or marine life are: Improve floodplain function and linkages between riverine and riparian habitats.

3. How would the proposal be likely to deplete energy or natural resources? N/A

Proposed measures to protect or conserve energy and natural resources are: N/A

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands? The proposed projects are designed to improve floodplain conditions and habitat within the State Wildlife Area. The Tucannon River is home to 3 ESA listed Salmonids: Bull Trout, Snake River Steelhead, and Snake River Chinook.

Proposed measures to protect such resources or to avoid or reduce impacts are: The projects will be done using the Best Management Protocols for habitat restoration. Impacted areas will be reseeded to native grasses and native shrubs and trees planted when appropriate. Sediment from construction and potential erosion will be secured using methods to control sedimentation or dust caused by construction of a project. Heavy Equipment will be clean and free from leaks of any petroleum based or caustic fluids. A designated fueling area will be established for all projects, with fire and spill kits available on site. Stream banks will be protected from damage and stream crossings will be minimized. All work will be done during the appropriate in-water work window. Project design will consider what species of fish and animals may be encountered and develop a work plan to minimize impacts to those species. The major goal of all of the projects is to provide restoration activities that provide benefit to natural functions and therefore are developed with minimizing impacts to habitat as a central goal.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans? The purpose of the plan is to improve conditions within the river floodplain, and will not encourage land or shoreline uses incompatible with existing plans.

Proposed measures to avoid or reduce shoreline and land use impacts are: The proposed projects are directed at reducing land use and shoreline impacts.

6. How would the proposal be likely to increase demands on transportation or public services and utilities? N/A

Proposed measures to reduce or respond to such demand(s) are: N/A

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment. The proposal is part of a larger collaboration and partnership with all stakeholders to improve protection of the environment. Partners: USFS, USFWS, NOAA Fisheries, Snake River Salmon Recovery Board, Umatilla Tribe, Nez Perce Tribe, Tri-State Steelheaders (RFEG), Columbia County Conservation District, and local landowners (citizens) in the Tucannon Valley.